# Methodology

#### Pre -amble:

The PTL is in an Energy Intensive manufacturing Industry. The competiveness in various parameters have increased, the most important being cost of inputs which includes Cost of Power also. PTL have benchmarked these parameters against the best in the Industry, which includes Power Input also.

## **Captive Power Generation**

Captive Power Plants (CPPs) for the Industry have come a long way in India. The estimates on captive power capacity in the India vary with the Central Electricity Authority putting the figure at about 12,322 MW while industry experts feel that it is much higher, close to 20,000 MW

Industrial sector is one of the largest consumers of Electrical energy in India.

Industry	Capacity MW	% Share
Cement	1223	9.9
Chemicals	2076	16.8
Electronics	59	0.5
Engineering	2479	20.1
Jute	207	1.7
Metals & Minerals	2404	19.5
Miscellaneous	784	6.4
Paper	473	3.8
Services	80	0.6
Sugar	706	5.7
Textile	1303	10.6
Unclassified	530	4.3
Total	12322	100
Source : Power Line Research		

However, a number of industries are now increasingly relying on their own generation (captive and cogeneration) rather than on grid supply, primarily for the following reasons:

- Non-availability of adequate grid supply
- ♣. Poor quality and reliability of grid supply
- ♣. High tariff for the Industry as a result of heavy cross subsidization
- ♣ Reliability of power supply from Captive Plants Provide a source of firm power





### Status of Captive Power in Tyre Sector:

The Tyre Sector comes as a Part of Engineering sector and boasts for a very high of approx. 20.1% of the total Captive Power Plant Capacity.

The Industrial houses have now gone in Large Captive power plants of corporate are selling surplus power as Merchant Power to the state electricity boards through 15-25 year power purchase agreements (PPAs) or to other Industry or even selling it through Electricity Trade Exchange.

### Sourcing the Power from the most dependable & economic source

While Captive Power will take some time, the Holding company has envisioned to be direct player in sourcing Power (buy & sell) and to make it available to its multi location usage in Tyre Industry as well as the Health Care Industry, all these location need a stable and Cheapest Power Supply, which can be optioned from Power Sourcing from the a dependable source.

# The enabling Provisions of the Gol

Electricity Act, 2003 and various Regulatory orders' intent is to develop the market through;

Increasing Categories of participants

- Captive Power Plants
- Consumers (energy intensive)
- Generators
- Distribution Companies etc.

And PTL will get covered in first two in due course.



### Methodology PTL intend to care of:

- Short & Medium Term transactions for peak/off-peak load balancing
- ♣ Duration of Transactions (1 day 3 years).
- ♣ Hours of Supply
  - ✓ Round the Clock
  - ✓ Evening Peak / Morning Peak
  - ✓ Night Off Peak / After Noon Off Peak
  - ✓ Night Hours + Morning Supply
  - √ 18 Hrs. / 8 Hrs. / 6 Hrs. supply.
- "As and When Available"Power for balancing Scheduled Interchanges
- ↓ "Weekend Power"

Central Electricity Regulatory Commission (CERC) -Section 9, allowing any captive power plant (using 25% of its own power to sell electricity through an open access system, without requiring any separate license. The balance can be sold through the Indian Energy Exchange (IEX), cleared by CERC, and promoted by PTC India Ltd, formerly Power Trading Corp. of India Ltd, and Financial Technologies India Ltd.

The Electricity act 2003 and CERC Regulations has recognized Electricity Trading ~ A separate licensed business entity. Trading helps in filling the demand and supply gap by optimum utilization of generation as well as transmission capacity. Power demand during the rainy seasons is low in the Southern States and high in Northern States. Whereas many of the States face high demand during evening peak hours, cities like Mumbai face high demand during office hours. The Eastern Region has a significant surplus round the clock, and even normally power deficit states with very low agricultural loads like Delhi have surpluses at night. This situation indicates enough opportunities for trading of power. This would improve utilization of existing capacities and reduce the average cost of power to power utilities and consumers.

PTL understands that Power trading inherently means a transaction where the price of power is negotiable and options exist about whom to trade with and for what quantum. In India, power trading is in an encouraging stage and the volumes of exchange are also growing. Ultimately the Plants of Apollo Tyres – the holding company of PTL, for which PTL will trade the Power will be served by the respective State Electricity Boards or their successor entities, Power Departments, at the usage location or the private licensees( Discoms) etc.



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PTL understands the interstate transmission network guided by rules and regulations, guidelines for open access transactions. The procedures for Open access transaction have been laid by CTU along with Regional Load Dispatch Centers.

With the help of this new legislation, more & more end consumers, generators and power intensive companies like the holding Company of PTL, are increasingly looking at maximizing their revenue and minimizing their cost by utilizing short term surplus available power as well as looking at enhancing their capacity with a view to commit to long term supplies. All this has been facilitated due to robust interstate transmission network and fully support of well defined rules & regulations, guidelines (under the guidance of Hon'ble regulatory commission) and due to the joint cooperation of all the Center Transmission Utilities (CTU) and Regional Load dispatch Centers (RLDC).

PTL understands that the Power Trading by nature is understood to be a business which requires three core aspects – information & networking, Quick decision making and planning & forecasting. PTL believes that, we have, as we are the part of manufacturing community and the manufacturing facility is one of the power intensive units so we have the reach there and apart from that most of these facilities either have there cwn Captive Power Generation plant or come up as major power producer so PTL knows them in a way we have good networking and planning and forecasting expertise and thus help the community Industry also.

PTL Enterprise Ltd. is geared up to trade power in the Pan India with initial focus of maximize the revenue of Power Purchase, followed up by generation of power owned by the group companies, Community Industry and reduce the cost of power input for manufacturing facilities of group companies by exploring various other options like surplus power states or by identifying small power producer (IPP) or most important utilizing off peak power.

